# AGENDA ITEM V D 1

# PROGRESS REPORT ON CONDITIONALLY APPROVED UNIT

# SOUTHERN UNIVERSITY AND A&M COLLEGE

# INTERNATIONAL CENTER FOR INFORMATION TECHNOLOGY AND DEVELOPMENT (ICITD)

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### BACKGROUND INFORMATION

In August 2007, the Board of Regents granted conditional approval for the aforementioned center:

> **Conditional approval is granted for the proposed International Center for Information Technology and Development at Southern University and A&M College for a period of five years, effective immediately. By June 1 of each year, the institution shall submit a revised annual budget for the upcoming year to the Associate Commissioner for Academic Affairs.**

The University submitted the requested annual budget, along with a progress report addressing Center activities to-date, to the staff in early June 2008.

### STAFF ANALYSIS

Effective AY 2007-2008, Southern University and A&M College (SUBR) was awarded NSF funding through its Division of Information and Intelligent Systems for a five-year period to create and maintain the ICITD. This Center's main objective is to investigate information technology transfer to developing nations. The University notes in its progress report that it also has secured additional funding through NASA to afford Center operations.

With regard to activity in its first year of existence (AY 2007-2008), the University reports the following:

> *Researchers at ICITD performed multi-national research and education programs on the adoption of robust IT applications such as tele-medicine, tele-education, tele-democracy, and E-government. The following are specific research activities we undertook:*
>
> 1. *Investigated the infrastructure bottlenecks to e-medicine transfer in Sub-Saharan Africa. We have been looking at infrastructure issues such as Internet, Teledensity, health institutions, and bandwidth.*
>
> 2. *Developed qualitative data collection instruments to investigate "1" above.*

3.      *In Ethiopia, we have established an adoption data collection project at Addis Ababa's Black Lion Hospital to investigate how Ethiopian physicians use TeleRadiology technologies to treat patients. Preliminary findings from this project were presented at the Summer IFIP 2007 conference that brings together scholars from all around the world who study IT transfer in developing nations.*

4.      *In Cameroon our research group is working with the Yaounde University faculty of medicine on an e-medicine project whereby cell phones are used to monitor hypertension patients based in rural areas that do not have a single medical doctor. Specifically, we have two ongoing projects on telemonitoring of patients suffering from hypertension. In the pilot, we are using simple Global System for Mobile (GSM) cell phones with basic text messaging to monitor this disease in an urban setting (Yaounde, the capital of Cameroon) and in five rural health centers of Cameroon (Dschang, Ndikinimeki, Bafia, Bangante, Ambam, Obala, Ebolowa). To measure service utilization, amass service data and assess human-technology interaction, we use a social network analysis framework to evaluate patters of relationships among people, departments, and organizations. Specifically, nurses are located in rural Cameroon. Nurses provide vital signs checks and routine medical examinations to patients in health centers (CMAs). Nurses text message cardiologists located in the urban hospital locations. Cardiologists assess these patient data, determine approach treatment plans, prescribe anti-hypertension medication, such as calcium channel inhibitors, beta-blockers and ACE inhibitors. Patients, in turn, receive their orders via their smart phones without incurring the costs associated with lodging, travel and health care services to and from rural and urban areas. Ongoing monitoring of patient outcomes is enabled via the smart phone by tracking/measuring the number of consultants and hypertensives per day, week, month, etc.*

In Year 2, the Center will extend its focus to provide support and consulting services to US-based businesses and governmental entities, as well as to governments of developing nations in sub-Saharan Africa, South America, and South East Asia.

| Revenue | Year 2 AY 2008-2009 |
|---|---|
| **Federal Grants** | |
| NSF Funding | $ 109,000 |
| NASA | 40,000 |
| NSF Funding (anticipated) | 168,000 |
| **TOTAL REVENUE** | **$ 317,000** |

| Expenditures | Year 2<br>AY 2008-2009 |
|---|---|
| Administration Salary/Release | $ 26,000 |
| Administrative Support | 6,000 |
| Faculty Salary/Release | 24,000 |
| Travel | 11,000 |
| Graduate/Teaching Assistantships | 25,000 |
| Equipment | 9,000 |
| Supplies | 3,000 |
| Stipends | 15,000 |
| **TOTAL COSTS** | **$119,000** |

The budget narrative describes that:

*The funds for Administration will be used to cover the salaries for Dr. Mbarika's post-doctoral scholar as well as short-term resident research associates that work in the center for periods up to one year.  Administrative support funds will also be used to supplement salaries for one secretary in the College of Business supporting the work of the Center.  The Center does not currently have need for a full time secretary and so we are using the services of the dean's secretary at the College of Business.*

*The funds for faculty will be used for Dr. Mbarika's summer salary as well for his national and international travel to Uganda, Kenya, Ethiopia, and Australia for data collection and results dissemination.  It will also cover for graduate students on the project to present their research findings at conferences.*

*Funds for technical support will be used to cover two graduate/research assistants (one at the doctoral-level and one at the masters-level).  We will also use these funds to purchase equipment (laptops) for the staff members as well as office supplies for the Center.*

### STAFF SUMMARY

The staff commends the University and the Center for its accomplishments and contributions to foreign aid during its first year of existence.  Staff notes that Center approval status is valid through September 1, 2012; however, as indicated in the original motion, a revised budget shall be due by June 1 2009, for year three of Center operations.

*STAFF RECOMMENDATION*

*The staff recommends that the Academic and Student Affairs Committee receive the June 2008 Progress Report Relative to Implementation of the International Center for Information Technology and Development (ICITD) at Southern University and A&M College. By June 1, 2009, the institution shall submit to the Associate Commissioner for Academic Affairs a revised annual budget for Year Three of Center operations.*